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Democratizing Access to Knowledge: Find Out What Open Educational Resources (OER) Have to Offer

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A Presentation for the Teaching Support Centre and Western Libraries
as part of Open Education Week

Overview

- Presentation Overview:
  - A – Open Educational Resources (OER) and their significance
  - B – Using OER
  - C – Copyright and Licensing Issues
  - D – Creating OER

- Goals for this Presentation:
  - Describe and contextualize Open Education Resources and their importance
  - Provide examples of how to use and locate OER
  - Clarify copyright and licensing issues
  - Provide an introduction as to how to create OER

A-I. The Openness Trend

- Over the past 10-15 years numerous ‘open’ movements have emerged:
  - Open source software
  - Open access scholarly publishing
  - Open data
  - Open education
  - Open educational resources
  - Open innovation
- Open initiatives generally aim at eliminating barriers and improving access
- However, there is a lack of consistency on what open implies

A-II. What Is Open Education

- Open Education (OE) and Open Educational Resources (OER) are distinct, but OER can be used to facilitate OE

- OE is a movement by some educational institutions to eliminate barriers to admission including:
  - Cost / financial limitations
  - Distance / geography
  - Academic requirements

- For example at Athabasca University, the only eligibility requirement is that one is at least 16 years old

- OE is a much broader project and raises questions of accreditation and student support

A-III. What Are Open Educational Resources (OER)

- Term "Open Educational Resources" coined at a 2002 UNESCO conference
  - OER defined as, "the open provision of educational resources, enabled by information and communications technologies, for consultation, use and adaption by a community of users for non-commercial purposes"

- The 2002 conference was held in response to the Massachusetts Institute of Technology's Open CourseWare (MIT OCW) initiative launched in 2001

- Alternatively the OECD in *Giving Knowledge for Free* (2007) defined OER as, "digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research"

A-III(ii). What Are Open Educational Resources (OER)

- OER and Open CourseWare (OCW) are often used interchangeably, though some OER may not necessarily be courseware
- OER are primarily university level materials, but there are primary and secondary OER available
- Three types of OER according to the OECD
  - Content – courseware and other learning objects
  - Tools – for creating and delivering resources
  - Implementation Resources – such as licensing systems
- Content is extremely diverse from lecture slides and examination/test material to streaming video, podcasts or any other material designed for teaching and learning

A-IV. OER Incentives and Barriers

- Institutional incentives/motives
  - Altruistic motive and academic tradition of the free exchange of knowledge
  - Allows for greater visibility and can be used for recruitment
  - Provides access to taxpayers for material they have funded
  - Encourages more collaboration and innovation in development of learning resources

- Institutional barriers
  - Costs of developing and sustaining OER initiatives
  - Fear that OER may undermine commercialization efforts

A-IV(ii). OER Incentives and Barriers

- Individual incentives/motives for creating OER
  - Altruistic motive and academic tradition of the free exchange of knowledge
  - Enhance one's scholarly reputation
  - The ease of sharing resources and potential benefit to others outweigh motives for not sharing

- Individual barriers for creating OER
  - Lack of institutional support including recognition of OER development in promotion and tenure considerations
  - Fear of loss of control over one's intellectual work
  - Fear of criticism from peers or the broader community
  - Confusion over copyright and licensing issues

A-IV(iii). OER Incentives and Barriers

- Individual incentives/motives for using OER
  - Costless, easily available, time-saving high quality material
  - Allows for the incorporation of outside perspectives in teaching
  - Interest in pedagogical innovation
  - Promotes education and teaching as collaborative and open activities

- Individual barrier for using OER
  - Concerns of the quality of the content
  - Lack of time and difficulty in locating content
  - Confusion over copyright and licensing issues

A-V. The Tension between the Public Good and Commercialization

- There are two important social arguments in favour of OER
  - They promote and facilitate lifelong learning
  - They expand access to educational materials to non-traditional students both nationally and internationally

- However, giving knowledge away for free conflicts with the increasing emphasis on commercializing university research (for example, see the Government of Canada's 2007 Science and Technology Strategy, and Western's own website on commercialization)

- Furthermore, depending on the nature of the information in question, individual researchers may end up loosing their own ability to commercialize their work by creating OER

- Given the tension between the social goals of OER and the economic goals of increased commercialization, how should scholars chose between conflicting priorities

B-I. Using OER

- Before using OER there are several important questions to consider:
  - Where to locate OER?
  - How to assess the authority and credibility of each OER?
  - How to determine if a specific OER allows modification?

- Fortunately, concerns over quality, authority and licensing terms can be addressed by carefully choosing where to find OER

B-II. Locating OER

- General OER Repositories, Directions and Search Engines:
  - Open CourseWare Consortium: http://www.ocwconsortium.org/
  - OER Commons: http://www.oercommons.org/
  - National Repository of Online Courses (NROC): http://www.courserepository.org/
  - World Lecture Hall: http://wlh.webhost.utexas.edu/
  - Google OCW/OER Search: http://www.google.com/cse/home?cx=000793406067725335231%3Afm2nczznoswy
  - iTunes U: http://www.apple.com/education/itunes-u/

- National OER Sites:
  - China Open Resources for Education (CORE): http://www.core.org.cn/en/
  - ParisTech Libres Savoirs (France): http://graduateschool.paristech.fr/?langue=EN
  - IREL-Open Project (Ireland): http://www.irel-open.ie/
  - Japan Open CourseWare Consortium: http://www.jocw.jp/

B-II(ii). Locating OER

- Institutional Sites:
  - MIT OpenCourseWare: http://ocw.mit.edu/index.htm
  - Carnegie Mellon Open Learning Initiative: http://oli.web.cmu.edu/openlearning/
  - Open Michigan (University of Michigan): http://open.umich.edu/
  - Connexions (Rice University): http://cnx.org/
  - Tufts University Open CourseWare: http://ocw.tufts.edu/

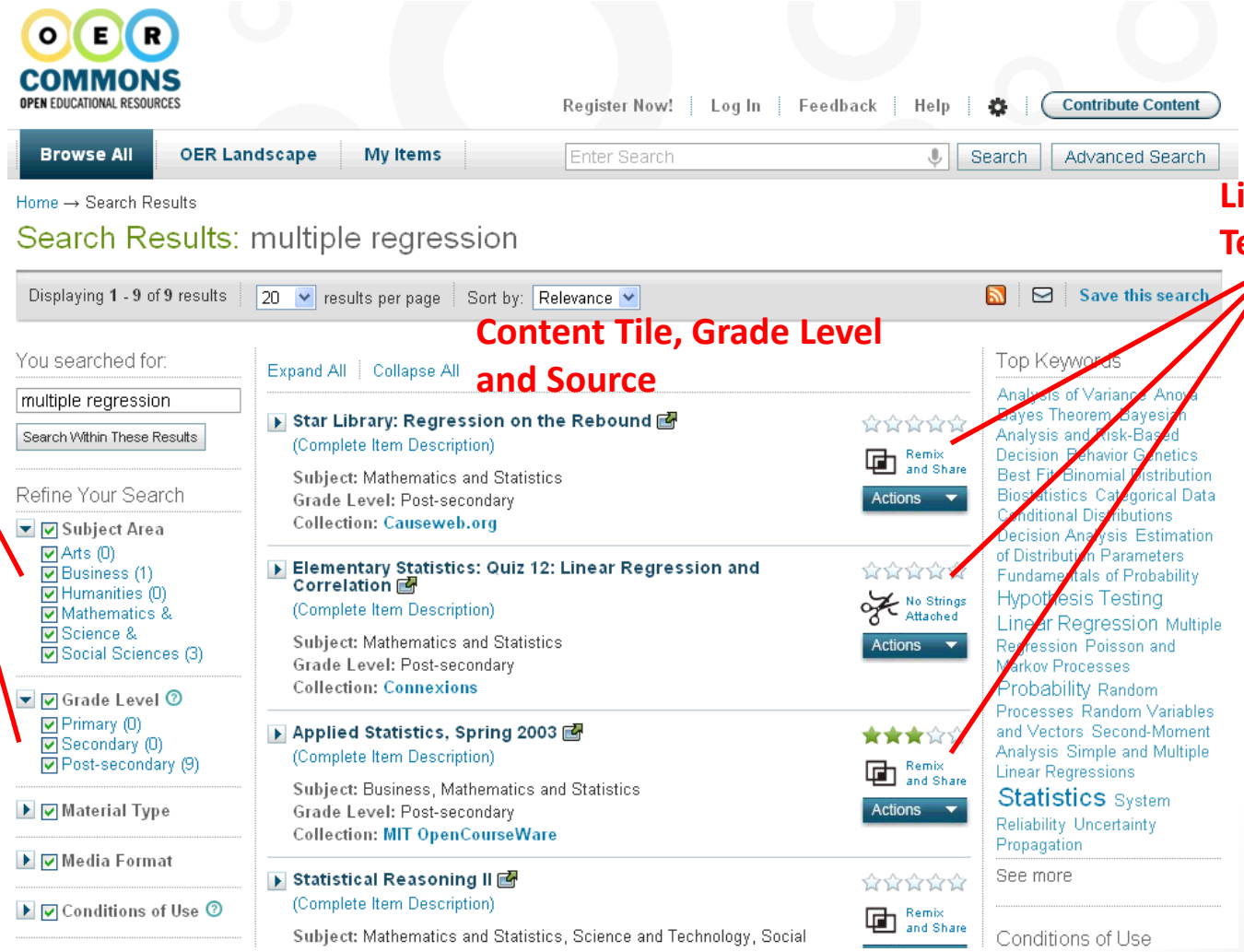
- Multimedia Repositories:
  - Multimedia Educational Resources for Learning and Online Teaching (MERLOT): http://www.merlot.org/merlot/index.htm
  - Europeana: http://www.europeana.eu/portal/
  - Free Sound Project: http://www.freesound.org/

- Discipline/Subject Specific Repositories:
  - OYEZ Project (audio archive of U.S. Supreme Court material): http://www.oyez.org/
  - John Hopkins Bloomberg School of Public Health Open CourseWare: http://ocw.jhsph.edu/

B-III. OER Example 1 – OER Commons

- OER Commons has over 30,000 OER though some resources are for grades K-12
- Materials are covered by four different types of licenses (“No Stings Attached”, “Remix and Share”, “Share Only”, and “Read the Fine Print”)
- Easy to use menus to narrow search results and navigable collections

B-III(ii). OER Example 1 – OER Commons



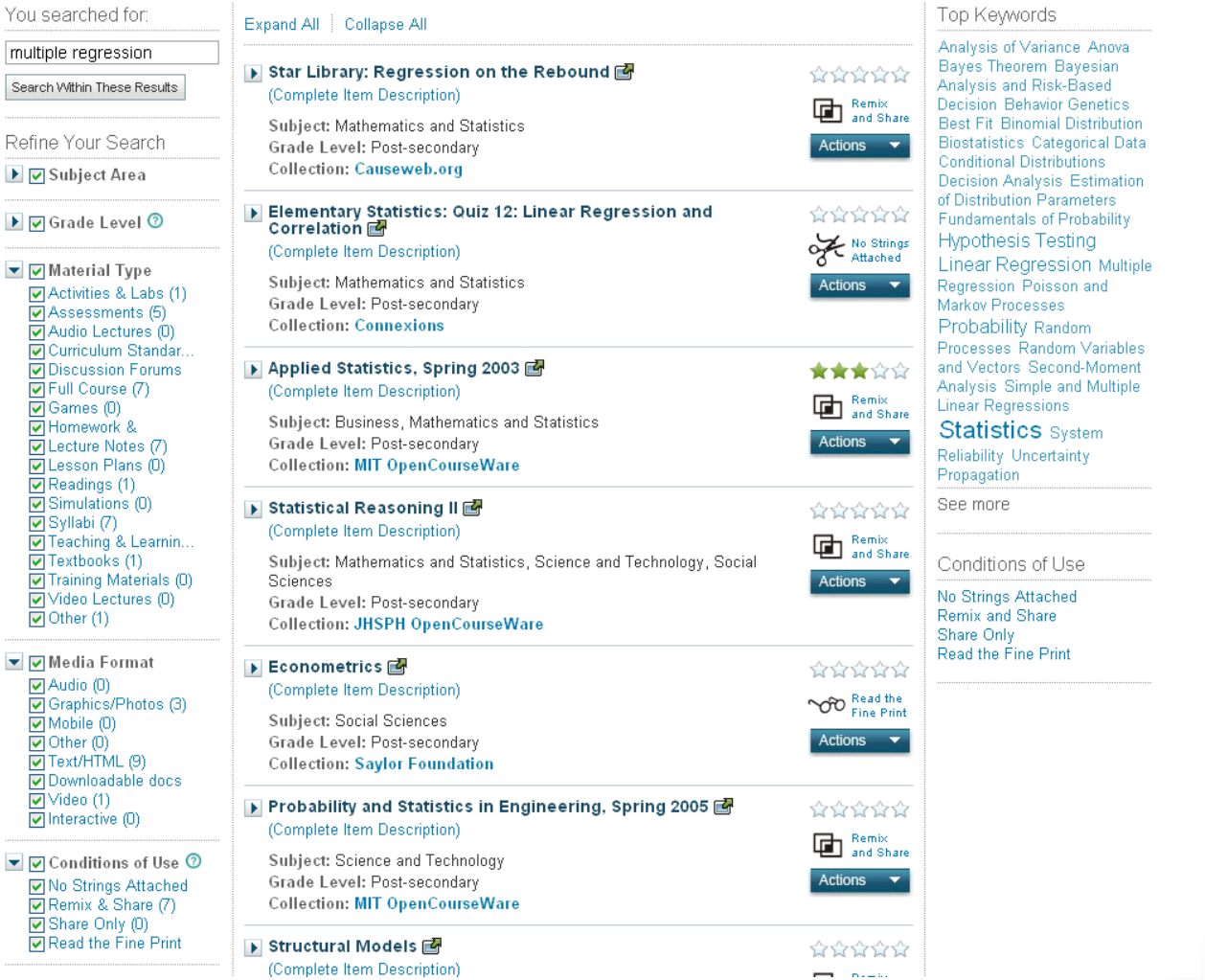
Simple menus to narrow search/ browsing

Content Tile, Grade Level and Source

License Terms

B-III(iii). OER Example 1 – OER Commons

Limit results by Material Type, Format, and License Terms



B-III(iv). OER Example 1 – OER Commons

OER COMMONS
OPEN EDUCATIONAL RESOURCES

Register Now! | Log In | Feedback | Help | Contribute Content

Browse All | OER Landscape | My Items | Enter Search | Search | Advanced Search

Home → Course Related Materials → Statistical Reasoning II

« Previous Item | Return to Search Results... | Next Item »

Statistical Reasoning II

Remix and Share

Author: McGready, John
Subject: Mathematics and Statistics, Science and Technology, Social Sciences
Institution Name: Johns Hopkins Bloomberg School of Public Health
Collection: JHSPH OpenCourseWare
Grade Level: Post-secondary

Abstract: Statistical Reasoning in Public Health II provides an introduction to selected important topics in biostatistical concepts and reasoning through lectures, exercises, and bulletin board discussions. The course builds on the material in Statistical Reasoning in Public Health I , extending the statistical procedures discussed in that course to the multivariate realm, via multiple regression methods. New topics, such as methods for clinical diagnostic testing, and univariate, bivariate, and multivariate techniques for survival analysis will also be covered. These topics will be reinforced with many "real-life" examples drawn from recent biomedical literature. While there are some formulae and computational elements to the course, the emphasis is again on interpretation and concepts.

Languages: English
Material Type: Full Course, Lecture Notes, Syllabi
Media Format: Graphics/Photos, Text/HTML, Downloadable docs
Technical Requirements: Adobe Acrobat

Conditions of Use: Creative Commons Attribution-Noncommercial-Share Alike 2.5

Go to OER Item

Add to My Items

Rate and Review

Evaluate Resource What is this?

Common Core Standards

Log in to align this item.

Share

Tags

Keywords, descriptive words, interested groups & more

Bivariate | Diagnostic Testing | Multiple Regression Methods | Multivariate | Public Health | Reasoning | Statistics | Survival Analysis | Univariate

B-IV. OER Example 2 – MIT OCW

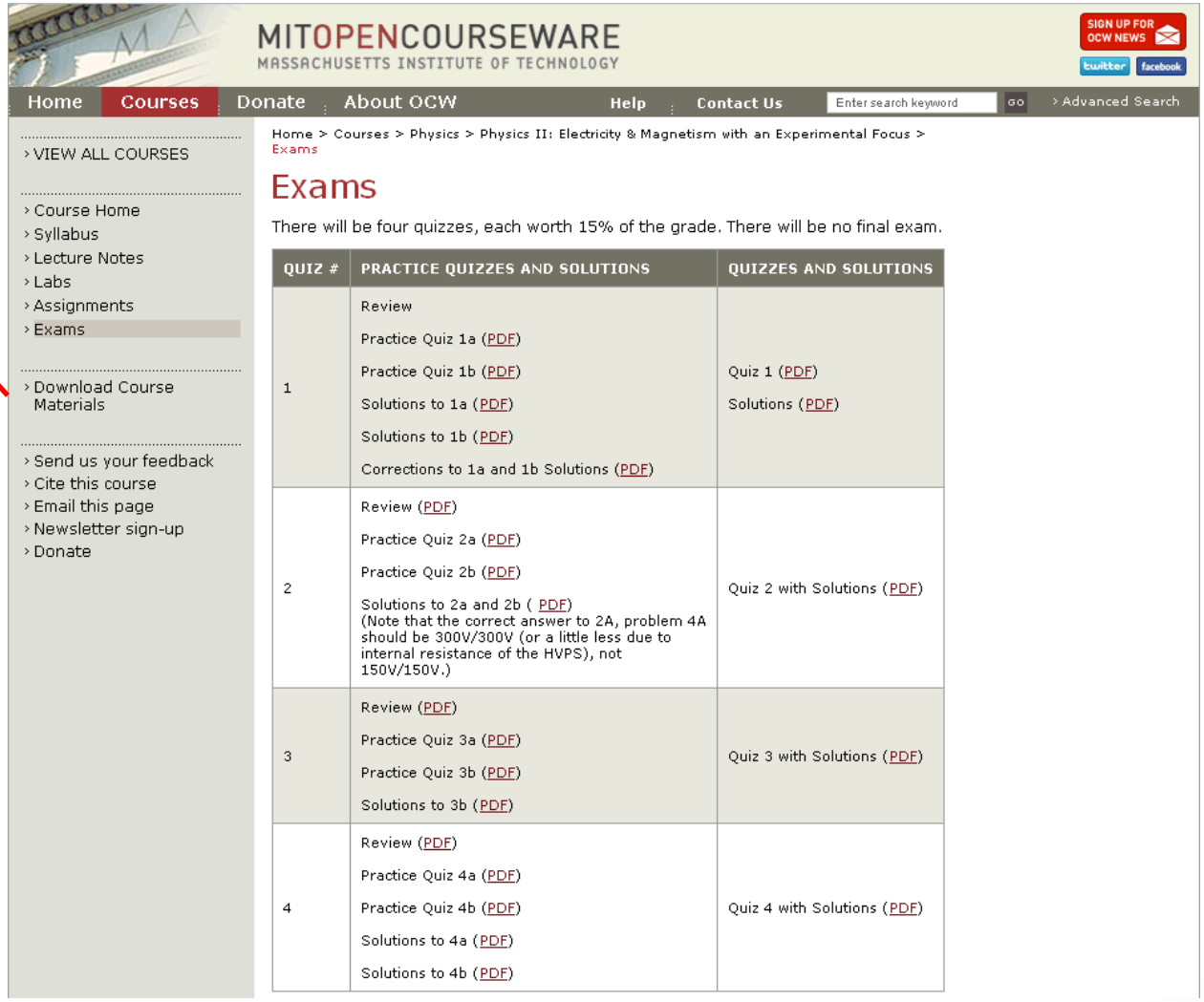
- MIT OCW site was instrumental in launching the OER movement
- Site is particularly well suited to browsing by course, and contains 200 courses
- In some cases content a particular resource is only useful when one has the whole course material (for example, a test will refer to the open course text book for specific questions)
- All materials licensed under a Creative Commons Non-Commercial ShareAlike License

B-IV(ii). OER Example 2 – MIT OCW

Icons provide indication as to what materials are included in each course

B-IV(iii). OER Example 2 – MIT OCW

Download courses in their entirety



MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIGN UP FOR OCW NEWS

Home | Courses | Donate | About OCW | Help | Contact Us | Enter search keyword | GO | Advanced Search

- VIEW ALL COURSES
- Course Home
- Syllabus
- Lecture Notes
- Labs
- Assignments
- Exams
- Download Course Materials
- Send us your feedback
- Cite this course
- Email this page
- Newsletter sign-up
- Donate

Home > Courses > Physics > Physics II: Electricity & Magnetism with an Experimental Focus > Exams

Exams

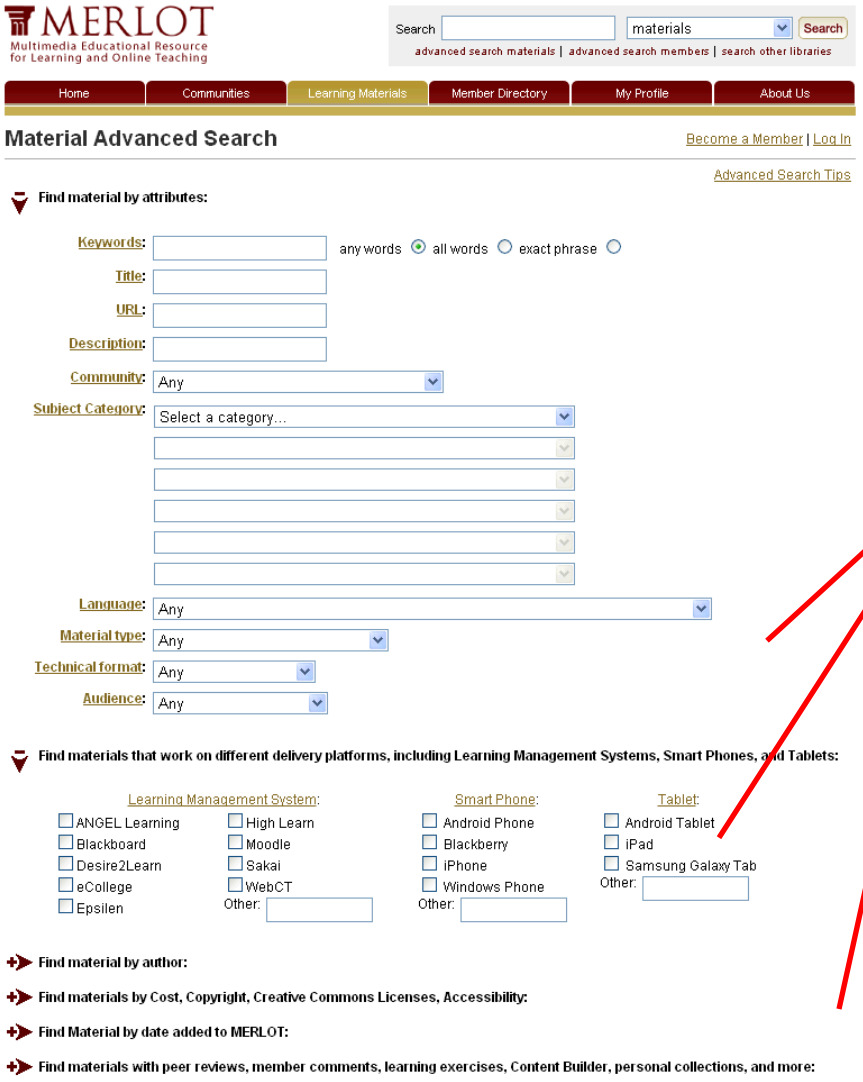
There will be four quizzes, each worth 15% of the grade. There will be no final exam.

QUIZ #	PRACTICE QUIZZES AND SOLUTIONS	QUIZZES AND SOLUTIONS
1	Review Practice Quiz 1a (PDF) Practice Quiz 1b (PDF) Solutions to 1a (PDF) Solutions to 1b (PDF) Corrections to 1a and 1b Solutions (PDF)	Quiz 1 (PDF) Solutions (PDF)
2	Review (PDF) Practice Quiz 2a (PDF) Practice Quiz 2b (PDF) Solutions to 2a and 2b (PDF) (Note that the correct answer to 2A, problem 4A should be 300V/300V (or a little less due to internal resistance of the HVPS), not 150V/150V.)	Quiz 2 with Solutions (PDF)
3	Review (PDF) Practice Quiz 3a (PDF) Practice Quiz 3b (PDF) Solutions to 3b (PDF)	Quiz 3 with Solutions (PDF)
4	Review (PDF) Practice Quiz 4a (PDF) Practice Quiz 4b (PDF) Solutions to 4a (PDF) Solutions to 4b (PDF)	Quiz 4 with Solutions (PDF)

B-V. OER Example 3 – MERLOT

- Multimedia Educational Resources for Learning and Online Teaching (MERLOT) contains over 33,000 resources
- Some, but not all materials are peer reviewed
- MERLOT has very granular search options

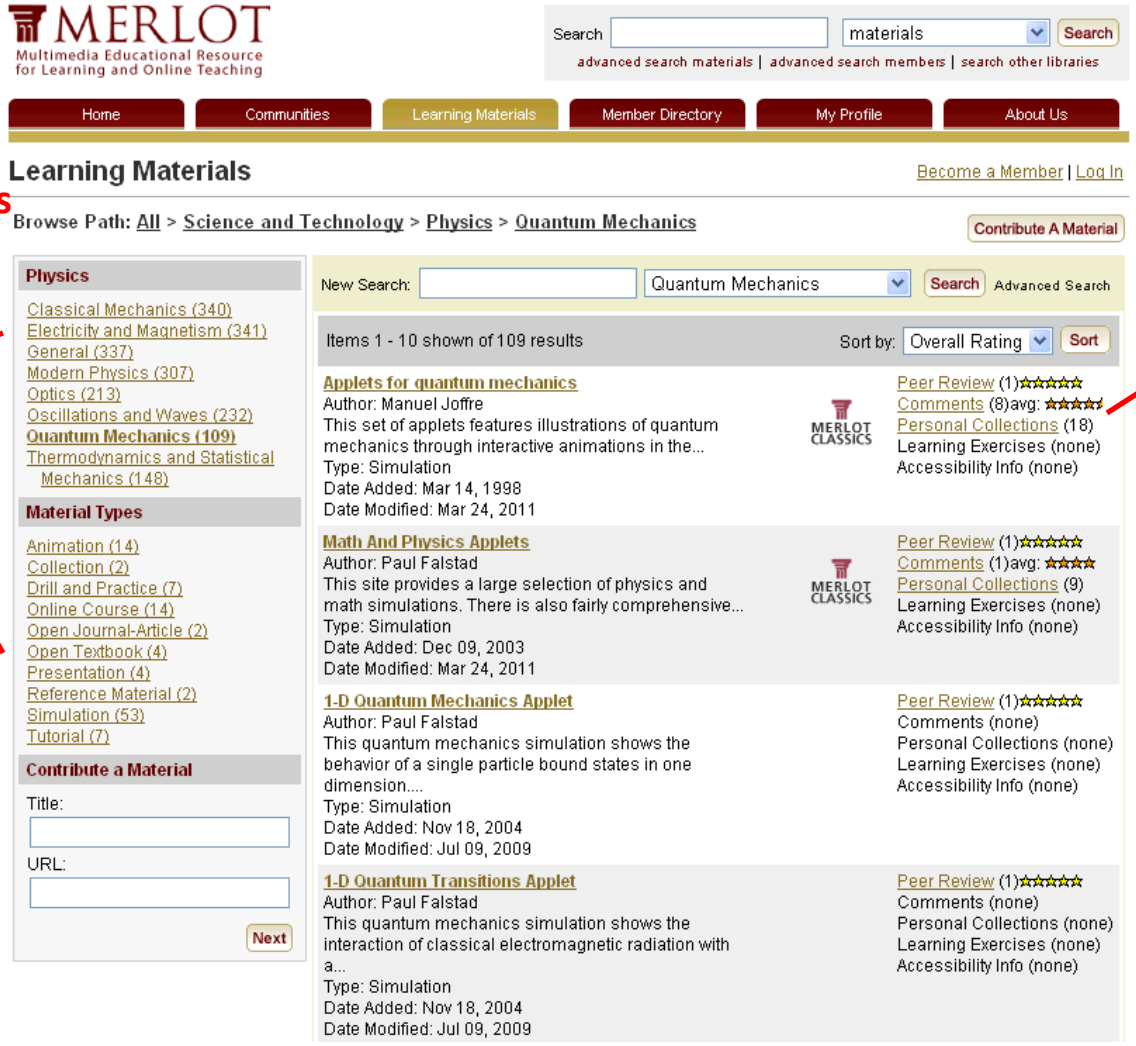
B-V(ii). OER Example 3 – MERLOT



Search options include material type, document format, materials for smartphones and tablets, licensing terms and peer review

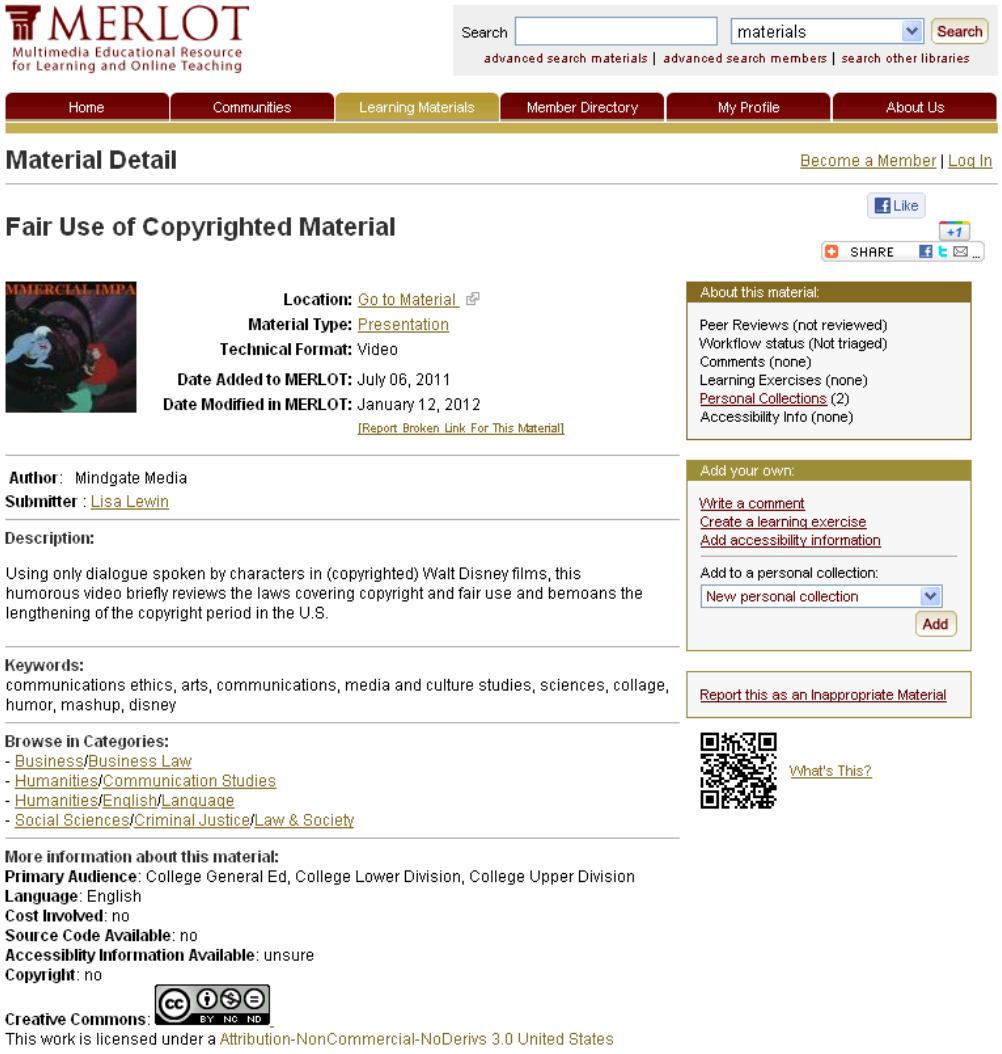
B-V(iii). OER Example 3 – MERLOT

Brows by discipline and field, as well as material type



Peer review score and user comments can assist in determining quality and usefulness

B-V(iv). OER Example 3 – MERLOT



MERLOT
Multimedia Educational Resource for Learning and Online Teaching

Search | materials | Search
advanced search materials | advanced search members | search other libraries

Home | Communities | Learning Materials | Member Directory | My Profile | About Us

Material Detail

Become a Member | Log In

Fair Use of Copyrighted Material

Like +1 SHARE

Location: Go to Material
Material Type: Presentation
Technical Format: Video
Date Added to MERLOT: July 06, 2011
Date Modified in MERLOT: January 12, 2012
[Report Broken Link For This Material]

Author: Mindgate Media
Submitter : Lisa Lewin

Description:

Using only dialogue spoken by characters in (copyrighted) Walt Disney films, this humorous video briefly reviews the laws covering copyright and fair use and bemoans the lengthening of the copyright period in the U.S.

Keywords:
communications ethics, arts, communications, media and culture studies, sciences, collage, humor, mashup, disney

Browse in Categories:
- Business/Business Law
- Humanities/Communication Studies
- Humanities/English/Language
- Social Sciences/Criminal Justice/Law & Society

More information about this material:
Primary Audience: College General Ed, College Lower Division, College Upper Division
Language: English
Cost Involved: no
Source Code Available: no
Accessiblity Information Available: unsure
Copyright: no

Creative Commons:
This work is licensed under a Attribution-NonCommercial-NoDerivs 3.0 United States

About this material:
Peer Reviews (not reviewed)
Workflow status (Not triaged)
Comments (none)
Learning Exercises (none)
Personal Collections (2)
Accessibility Info (none)

Add your own:
Write a comment
Create a learning exercise
Add accessibility information
Add to a personal collection:
New personal collection
Add

Report this as an Inappropriate Material

What's This?

C-I. OER, Copyright and Licensing

- Copyright is a barrier to both OER use and creation

- Licensing is essential to making a resource open:
  - Copyright inhibits both use (copying, modifying, and publishing materials) and creation (preventing others from copying, modifying and publishing)

- In the case of creation there are added concerns, as third party material included within an OER must be checked and possibly cleared with the rights holder
  - Checking copyright/licensing terms and locating the rights holders/clearing rights can be more time consuming than creating the OER

C-II. Copyright

- Copyright automatically subsists in original creative works (including software) – no © symbol or "Copyright, John Doe 2012" is required

- Exclusive rights of the copyright owner (*Copyright Act* s. 3):
  - Copy, publish or perform the work or a substantial part of it
  - Translate a work or convert a work into another format
  - Communicate a work by means of telecommunication
  - Authorize any of the above acts

- While there are exceptions (fair dealing (Can.)/ fair use (U.S.)), they are limited, as are specific exceptions for educational institutions/educators

- Eventually copyright expires – but only after a long time
  - Copyright term in Canada is the life of the author + 50 years

C-III. The Public Domain

- Public domain describes intellectual material which is not covered by intellectual property rights and includes:
  - Materials where they term of protection has expired
  - Materials never protected (e.g. non copyrightable material)
  - Materials where copyright has been forfeited

- Examples include:
  - Works of Dickens and Tolstoy (copyright expired)
  - Facts and ideas (not copyrightable)
  - U.S. government materials (not covered by copyright)

- Although there are no restrictions on using public domain materials, as an author/creator if you surrender your work to the public domain you have no control over it

C-IV. Licensing and Creative Commons

- Licensing systems, such as Creative Commons, offer a way of mediating between the restrictions of copyright and lack of control of the public domain

- Creative Commons is the overwhelmingly most common licensing scheme, but others exist (such as the GNU Free Documentation License)

- Creative Commons licenses operate on three layers:
  - Legal code – the legal, "fine print" version of the license
  - Digital code – a machine readable copy of the license attached to the document's metadata
  - Human code – the plain language summary of the license including relevant icons to indicate license terms

C-V. The Creative Commons Licenses

- All Creative Commons licenses provide several common features:
  - They are irrevocable, worldwide, last the duration of the copyright term and in no way circumscribe fair dealing/use rights
  - Users are given the rights to copy, distribute, display, digitally perform and change the format of a work
  - Every copy of the work should maintain a link to the license, and all copyright notices within a work should not be removed
  - Attribution must always be given to the author (**BY**)

- Creators can chose additional options based on their preferences:
  - Non-Commercial (**NC**) – materials should not be used for commercial purposes
  - No Derivatives (**ND**) – others cannot make derivative works based on the original
  - Share Alike (**SA**) – others may make derivatives works, but such works must contain identical licensing terms as the original

- The ND and SA options are incompatible

C-V(ii). The Creative Commons Licenses

- **Attribution (CC BY)** – any type of reuse (derivatives) allowed so long as the original source is credited

- **Attribution, Share Alike (CC BY-SA)** – any type of reuse allowed so long as the original source is credited, and the resulting content has the same licensing terms

- **Attribution, No Derivatives (CC BY-ND)** – allows for redistribution (both commercial and non-commercial), but content must remain whole and original source credited

- **Attribution, Non-Commercial (CC BY-NC)** – allows for redistribution and derivatives, but cannot be commercial in nature and original source must be credited

- **Attribution, Non-Commercial, Share Alike (CC BY-NC-SA)** – allows for derivatives, but they must be non commercial, credit the original source, and carry the same licensing terms

- **Attribution, Non-Commercial, No Derivatives (CC BY-NC-ND)** – allows for only non-commercial redistribution of the original and source must be credited

D-I. Creating OER

- Even though extensive OER exist, there are still gaps to be filled
- Start small – take a guest lecture or syllabus and publish it
- OER are best developed collaboratively
- Ask for feedback from both peers and students
- Seek institutional support for both space to publish materials and recognition for OER work
- Be mindful of copyright and other intellectual property rules as well as privacy policies and legislation

D-II. Creation Considerations

- As an OER creator you have two means to control how open the resources is:
  - The licensing terms, and
  - The format of the file(s)

- Surrender to the public domain, a CC Attribution (CC BY) license, and a CC Attribution, Share-Alike (CC BY-SA) licenses grant other users the greatest amount of freedom

- Editable file formats (such as HTML, RTF and PNG) allow for much easier modification, while formats such as PDF fetter alteration

- Logically, if the license allows modification of the OER, it makes sense to disseminate the file in an editable format

D-II(ii). Creation Considerations

- Consideration should also be given to proprietary file formats – many users may not be able to use the most current versions of major commercial software
- Hyperlinks are most useful when they are both linked and have the URL provided as potential users may print materials rather than use them in electronic form
- Large fonts, captions for audio materials and clear contrasts between colours make works more accessible
- Localized or obscure cultural references, slang and neologisms can impede learning by users who are not familiar with the author's language and culture

D-III. Disseminating OER

- Four major ways to disseminate one's resources:
  - Institutional repository (e.g. Scholarship@Western)
  - Open Repository (e.g. OER Commons)
  - Online OER Generation Site (e.g. Connexions)
  - Social Networking and Web 2.0 sites (e.g. YouTube and Flickr)
  - Use an

- Creative Commons has specific webpages for both how to mark one's own work with a license, and how to properly attribute other's CC work

- Microsoft offers an add-in that allows for easy marking of Word, Excel and PowerPoint documents with a CC license

References and Additional Resources

- OER Publications
  - OECD. 2007. *Giving Knowledge for Free* . Paris, OECD: http://www.oecd.org/dataoecd/35/7/38654317.pdf
  - UNESCO/Commonwealth of Learning (COL). 2011. *Guidelines for Open Educational Resources (OER) in Higher Learning*: http://www.col.org/PublicationDocuments/Guidelines_OER_HE.pdf
  - UNESCO/COL. 2011. *Basic Guide to Open Educational Resources (OER)*: http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf
  - Iiyoshi T. & Kumar M. S. V. 2008. *Opening Up Education*. Cambridge, MA: MIT Press: http://mitpress.mit.edu/books/chapters/0262033712pref1.pdf

- General OER Websites:
  - UNESCO OER Portal: http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-educational-resources/
  - OECD OER Portal: http://www.oecd.org/document/20/0,3746,en_2649_35845581_35023444_1_1_1_1,00.html
  - Commonwealth of Learning (COL) OER Site: http://www.col.org/resources/crsMaterials/Pages/OCW-OER.aspx
  - Open Education Week Website: http://www.openeducationweek.org/
  - Creative Commons Education Portal: http://creativecommons.org/education
  - William and Flora Hewlett Foundation OER Site: http://www.hewlett.org/programs/education-program/open-educational-resources

References and Additional Resources

- OER Search Engines:
  - Open CourseWare Finder: http://opencontent.org/ocwfinder/
  - Global Learning Objects Brokered Exchange (GLOBE) Alliance: http://www.globe-info.org/
  - Folksemantic: http://www.folksemantic.com/

- OER Directories and Repositories:
  - Consortium for Educational Communication Learning Objects Repository: http://www.cec-ugc.org/lor/Default.aspx
  - OER Africa: http://www.oerafrica.org/

- Institutional Sites:
  - The Open University's Learning Space: http://openlearn.open.ac.uk/
  - Utah State University Open CourseWare: http://ocw.usu.edu/
  - University of Notre Dame Open CourseWare: http://ocw.nd.edu/
  - University of California, Irvine Open CourseWare: http://ocw.uci.edu/SpecialIndex.aspx
  - Open Yale Courses: http://oyc.yale.edu/
  - African Virtual University: http://www.avu.org/

- Information on Accreditation in Higher Education
  - Accredited Online Schools and Colleges: http://www.accreditedonlinecolleges.org/Guide/

Copyright and License Notes and Feedback

- Copyright and License Notes
  - Open Education Week Logo (slide 1) - © openeducationweek.org, used under a Creative Commons Attribution 3.0 License
  - OER Commons screenshots (slides 14-17) – © OER Commons, used under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License
  - MIT OpenCourseWare screenshots (slides 18-20) – © MIT, used under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License
  - MERLOT screenshots (slides 21-24) – © MERLOT, used under a Creative Commons Attribution-Noncommercial-NoDerivs 3.0 License

- Feedback
  - The author (Michael B. McNally) welcomes any and all feedback by email – mmcnall2@uwo.ca